

THE

Soybean Digest



Official Publication

OF

THE AMERICAN SOYBEAN ASSOCIATION

VOLUME 2 • NUMBER 4



FEBRUARY • 1942



DANNEN'S Soybean Oil Meal

Here you see the meal sacking floor in our modern soybean mill. Meal from the soybeans you raise is bagged here for shipment all over the western United States, thus furnishing you with a year round market for the beans you raise.

Use Dannen's Soybean Oil Meal on your farm and help build a market for your own beans.

Dannen Grain & Milling Co.
ST. JOSEPH, MISSOURI

WOODSON-TENENT LABORATORIES

MEMPHIS, TENNESSEE and CAIRO, ILLINOIS

*Analysis of Soybeans
and Products*

Official Chemists for National Soybean Processors Association

BEFORE SELLING, PLEASE CONSULT

STERNE & SON CO.

"JUST BROKERS"

Oldest Handlers of Soybean Oil

Direct to All Refiners

Board of Trade Building
CHICAGO, ILLINOIS

Telephone:
HARRISON 4797

THE Soybean Digest

Vol. 2

FEBRUARY 1942

No. 4

IN THIS ISSUE

	Page		Page
Editorials	1	New Soybean Goals.....	6
Yield Contests	2	Soybeans and People.....	8
Four Men Look at the Soybean Situation.....	3	Soybeans for Farm Gardens..	11
Washington Beat	4	Market Summary.....	Inside Back Cover

Published on the 15th of each month at Hudson, Iowa, by the American Soybean Association. Entered as second class matter November 20, 1940, at the postoffice at Hudson, Iowa, under the Act of March 3, 1879. Forms close on 10th of month. Subscription price to association members, \$1.00 per year; to non-members, \$1.50 per year.

BUILD MORALE FOR DEFENSE

Eat Soybean Products

Let us help plan unusual menus for your parties.

We carry a complete line of

"MILLER'S SOYA FOODS"

Green Soya Beans 20c Soya Malt 40c

Write for a Price List

PREHN'S HEALTH FOOD STORE

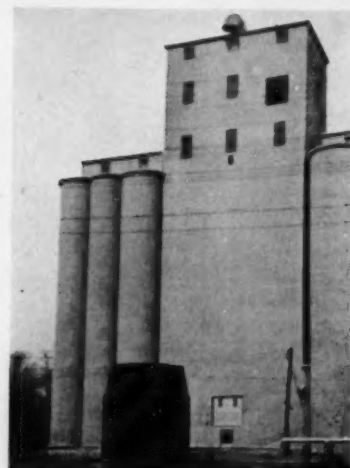
700 S. Goodwin

Urbana, Illinois

Telephone 6-1691

NEED EXTRA STORAGE?

Then Plan Now
For Your New
Neff & Fry
Storage Bins



Get set now for the record deliveries of wheat, corn, and soybeans anticipated for 1942. Neff & Fry monolithic (or stave) bins will give you the reserve storage space you may so urgently need.

Many important elevator installations are proof of N & F sound construction methods and careful attention to details. Full details await your request.

THE NEFF & FRY COMPANY

CAMDEN, OHIO

Stave or Monolithic Construction

NEFF & FRY STORAGE BINS

SOYBEAN SEED TESTING NECESSARY

The Library of Congress
Central Serials Record
Received
FEB 25 1942

THERE have been some indications during the past month of a "seed panic" in regard to the soybean seed situation, but happily these reports seem to have painted a gloomier picture than is actually justified. However, there is no question but that germination is below normal.

Under the present circumstances it appears that there are adequate supplies of seed stocks available, but that samples of all seed should be tested — and as soon as possible. In this way, growers with low-germination stock will be able to make sure that their supply of good seeds is sufficient to meet their needs for next spring.

Costs for obtaining official germination tests range from 30c to 50c, so it is foolish for anyone to be without this service unless he is in possession of a germinator himself. As germinators are quite scarce, most growers will be forced to rely upon official tests.

The USDA has underwritten the seed market by promising to purchase all lots of un-mixed approved varieties of soybeans remaining on hand May 31 at a price of \$2.00 per bushel, provided the germination is 85 per cent or better. This will be handled through the Commodity Credit Corporation. The Secretary of Agriculture has requested that soybeans suitable for planting be withheld from crushing until farmers have had sufficient time to make necessary purchases for spring seeding.

In the face of the below-normal germination situation, prices for good seed have been higher than normal, but they are still only a fraction of the prices which recently have been paid for a "get rich quick" variety.

We can only advise that you obtain your seed as soon as possible, from a reliable source, and of an approved variety — and that you have a sample of it tested for germination. One other word of caution: Soybeans with a moisture content of 15% or higher will likely have a poorer germination record in the spring than they have now. This will be due to heating when warm weather arrives.

A moisture content of 12% is the highest that is safe from the standpoint of soybean seed.

DUE to the large number of meetings during the past months, we have been unable to give the attention that we would like to all the speeches which were of interest to the soybean industry. We have presented briefs of four views of the industry obtained at the program at Ames February 9 in which the American Soybean Association cooperated.

The fact that we have "played up" this meeting should not be taken as a reflection on the soybean programs at Illinois, Purdue, Ohio State or any of the other states. We are using this material because it is of general interest, and we believe that it pretty well taps the situation as it now exists. This, no doubt, was accomplished equally well or better at several of the other meetings.

AS the bulk of all burlap is imported from India, and bottoms for transport of other than directly military commodities are scarce, the Government now is requiring that two-thirds of all burlap imports be set aside as a reserve.

The remaining one-third of the burlap may be used for agricultural bags, which, however, must be rationed strictly on the basis of previous requirements and current 30-day needs of users.

The soybean industry is one of the large users of burlap, which is used for bagging of soybean oilmeal. In this case, while anticipating their requirements and placing them before their normal sources of supply, members of the industry have run into delays, and must expect more serious difficulties.

Recognizing the cause, they will be patient with the bag companies, which are doing everything in their power to remedy the situation, by accumulating stocks of second-hand bags, which will be used wherever possible.

New companies, and companies which have recently opened new plants, will have a slightly different problem. They must prove their need for bags. The representatives of any of the leading bag companies will assist them insofar as is possible.

(Continued on page 5.)

THE Soybean Digest



Published by the American Soybean Association, Hudson, Iowa, as a service to its members. Forms close on 10th of month. Subscription price, to association members, \$1.00 per year, to non-members, \$1.50 per year. Advertising rates on application.

GEO. M. STRAYER, Editor

ROBERT BLISS, Managing Editor

VOL. 2 · NO. 4

A Smile of Victory!



PAUL Wessbecker of Mt. Pulaski, Illinois shown here handling a sample of Illini soybeans grown on his farm in Logan county, has no fears about filling his quota in the Food for Freedom program.

Mr. Wessbecker was announced as the winner of the first annual Illinois ten-acre soybean growing contest at the annual banquet of the Illinois

Crop Improvement Association in Urbana, February 4. His yield was 50.73 bushels per acre and his score 99.05!

Score was based 40 per cent on yield, 25 per cent on economy of production, 20 per cent on oil content, and 15 per cent on quality of soybeans.

Frank S. Garwood & Son, of Ston-

ington, Christian County, was second with a yield of 41.86 per acre and a score of 89.12, and Fred E. Phillips of Arthur, Moultrie County, third with a yield of 41.63 per acre and score of 87.90. Both Garwood and Phillips grew Chief soybeans.

Silver pitchers were presented to the first two place winners and a silver plate to the third place winner.

Hirsch Brothers, Oreanna, Illinois, were honored as grand champion winners of the soybean division of the International Grain show at Chicago in December.

Hoosier Contest

ELDON Neal of Romney, Tippecanoe county, won the Indiana two-acre soybean yield contest with a yield of 42.4 bushels per acre. Mr. Neal's beans were of the Illini variety, seeded solid.

Jesse G. Martin, Walton, Cass county, was second with Richland soybeans yielding 40.3 bushels per acre. Mr. Martin planted his soybeans in 18 inch rows.

John Leuck of Talbot, Benton county, was third with a yield of 36.7 bushels per acre. He also planted Richland beans — in 21 inch rows. Mr. Leuck won the 1940 Indiana contest with a per acre yield of 43.1.

Iowa Competition

FRANK Aliger of Paton was adjudged the winner of the first annual Iowa five acre soybean yield contest. Aliger obtained a yield of 33.83 bushels per acre with Mukdens.

E. W. Lichty, Waterloo, was second with a yield of 32.76. He entered a 5-acre plot of Dunfields. Nels Nelson of Correctionville, the third place winner, had a per acre yield of 31.39 with Mukden soybeans.

Lynn Paine, Mitchellville (Manchu) and John R. Weigle, Waterloo (Illini) were fourth and fifth place winners with yields of 30.76 and 30.38 respectively.

Prizes of \$50, \$40, \$30, \$20, and \$10 were awarded the winners.

SOYBEAN DIGEST

Four Men Look at the Soybean Situation

(Ed. Note: A tremendous challenge faces American soybean growers and processors as a result of the initial Japanese successes in the southeastern Asia. A billion more pounds of vegetable oil must be produced to compensate for oils which heretofore have been imported. More than one-third of the increase must be supplied by the soybean industry.)

At Ames, Iowa, February 9, the American Soybean Association cooperated with the College in presenting a special soybean program, at which some of the problems implicit in the expansion program were threshed out.

Outstanding perhaps was the statement by Dr. Walter W. Wilcox, farm management expert on the college economics and sociology staff, that the increased soybean production planned for this year is justified on a permanent basis.

Following are briefs of talks at the meeting, featuring the viewpoint of an agronomist, an economist, a feeder, a grower and a processor. In addition to the speeches briefed here were addresses by A. J. Loveland, chairman of the Iowa AAA, George M. Strayer, editor of *The Soybean Digest*, and Howard Roach, Iowa A.S.A. director, who also discussed implications of the expansion program.)



Agronomist

By Dr. W. H. Pierre, Head
Department of Agronomy,
Iowa State College

THE need for a large increase in soybean acreage to meet our wartime production goals raises many questions among farmers about the effect of soybeans on soil fertility as well as the reverse, the effect of soil fertility on soybean yields.



Dr. Pierre

Being a legume, soybeans are often considered a soil-building crop. This is true, however, only when the crop is plowed under as green manure. When they are used for grain production, which is of primary interest at present, soybeans should be considered essentially as a soil-depleting crop. This does not mean, however, that soybeans are "harder on the land" than corn.

Two Effects

Like all cultivated crops, soybeans influence soil fertility in two ways: Directly by removing plant food elements from the soil, and indirectly by exposing the soil itself to serious loss by erosion. The loss of soil by erosion when soybeans are grown on sloping land may be even greater than with corn, because soybeans leave the soil rather loose and easily erodible. Moreover, like corn, it is seeded late in the spring, and soil washing often takes place before the crop makes enough growth to protect the soil.

For these reasons soybeans are best suited to level or only gently rolling soils. When grown on soils of rolling topography, they should by all means be seeded on the contour. Other practices should also be followed, such as strip cropping and the use of grassed waterways. Where winter wheat is grown, it serves this purpose, and fits well into the rotation after soybeans. In areas further north a rye cover crop should be grown if possible.

...

Dr. Pierre continued, discussing the amounts of phosphorus and potassium removed from the soil by soybeans, which, he stated, are not greatly different from the amount removed by the average of the crops now being grown in a common corn-belt rotation.

However, he pointed out that when the hay is removed, soybeans deplete the soil of considerable nitrogen and organic matter as well, and because of this and the war emergency recommended the growing of soybeans as grain and alfalfa and clover for hay. He suggested a corn, soybeans, oats, clover rotation.

...

Economist

By Dr. Walter W. Wilcox,
Iowa State College

WILL the production of 9 million acres of soybeans (the 1942 goal) upset 1942 livestock feed production plans? The answer is no. The feeding value of the soy-

bean meal from a 20-bushel soybean crop is roughly equivalent to a 50-bushel corn crop. This is true because we are short of proteins in our livestock feeding rations. In a ration low in protein a pound of soybean meal on the average will replace about 3 pounds of corn.

Do present war demands call for an expansion of the industry that will not be justified after the war is over? Unless 1943 goals are substantially higher than those announced for 1942, again the answer is no.

Evidence Listed

The supporting evidence: Soybeans derive their value almost entirely from the 9 pounds of oil and 48 pounds of high protein meal processed from a bushel of beans. Soybean oil is interchangeable with cottonseed oil, coconut oil, corn oil, and several other vegetable oils and lard in many uses. These oils and lard have been selling within a fraction of a cent a pound of each other for the past few years.

Preliminary estimates of the Bureau of Agricultural Economics indicate that domestic production of fats and oils other than butter in 1941 was 4 billion pounds, with soybean oil accounting for only 409 million. Something over a billion pounds of competitive oils were imported. In other words soybean oil in 1941 was only 5 to 10 percent of the total volume of fats and oils which are within limits substitutable for one another. Increasing soybean oil production by 300 to 350 million pounds will not have any effect on the price of soybean oil except as it affects the larger total.

The soybean meal situation is not far different from the oil situation. Soybean meal makes up approximately 30 percent of the total supply of high protein meals but only 2 percent of the total feed concentrates supply. The quantity used for industrial purposes is negligible and of little importance in determining market values.

These high protein feeds are all priced on a directly competitive basis. Again increasing the soybean meal supply by 50 percent will only increase the total high protein feed

(Continued on page 4)

IT'S THE WAY —

(Continued from page 3)

supply by 15 percent and the total feed concentrates by 1 percent. Hence the price of soybean meal in the near future and in the post-war period will depend largely on the price of corn and other feed supplies rather than on soybean meal supplies.

Feeder

By Dr. Paul Gerlaugh,
Ohio Ag. Experiment Station

THE foundation nutrients in protein are amino acids. There are ten of these amino acids known to be essential for normal growth. These various amino acids are found in very good "balance" in a good quality soybean oilmeal. In other words, much of the superiority of soybean oilmeal as a protein concentrate is due to its very good amino acid makeup.

Soybean oilmeals are noticeably deficient in minerals. Some manufacturers add minerals to their meal while others do not. It is impossible for the manufacturer to add the correct amount of minerals for all conditions, so my recommendation to you is to consult your own good college authorities on this point.

I should like to summarize my thoughts by stating that soybean oilmeal with a pleasing odor and taste whether made by the expeller, solvent, or hydraulic process:

Is palatable and therefore readily eaten by all classes of livestock.

Is an economical source of very efficient protein.

Is a protein concentrate that blends exceptionally well with corn.

Leads the list of protein concentrates of plant origin.

Can be used as a major ingredient in a mixed supplement where economy and performance are desirable.

Needs minerals added.

Needs attention given in process of manufacture so as to produce a good quality product.



Dr. Paul Gerlaugh

Processor

By H. R. Schultz, Manager
Standard Soybean Mills,
Centerville, Iowa

WE who are deeply interested in the soybean industry must concern ourselves not only with the present emergency but we must prepare for a continued healthy expansion when peace comes. While keeping in mind the necessity of greater production now, we must not be blind to the need for expanded markets after the war.

Our industries may be expected to find more and more uses for soybean oil and with these larger outlets the present price disparity between soybean oil and some of the oils for which it substitutes may be expected to disappear. Likewise, soybean oil meal with the help of the soybean grower can become a more and more popular feed. Iowa farmers can and should consume all of the meal that the present Iowa soybean mills can produce.

Remember that soybean oil and soybean oilmeal are part of the same equation, we cannot produce one without producing the other. We are depending on industry to provide a market for more and more soybean oil. We must help to provide our own market for the increased production of soybean oilmeal.

— s b d —

Seed Directory

A charge of \$1 has been made for listing in the February, March and April issues. Listings for the March and April issues can be made for 75c. Quantity for sale and variety are included.

Ohio

Delphos — L. W. Adam, 110 bushels Dunfields, 80 bushels certified.

Maumee — W. N. Woods, 1,000 bushels Richland certified, 150 bushels Bansei edible soys.

Indiana

Fort Wayne — O. L. Bryant & Son, R. 4, 400 bushels Richland certified, 700 bushels Dunfield certified.

Illinois

Arthur — Turner Seed & Supply, 1,200 bushels certified Chief, 5,000 bushels Illini, 3,000 bushels Dunfield, 1,000 bushels Mansoy.

Mason City — Ainsworth Seed Company, 1,500 bushels Illini, 50 bushels certified Chief.

Iowa

Breda — Edward Putbren, 700 bushels certified Mukden

Hudson — Strayer Seed Farm, 1,000 bushels Mukden, 500 bushels Richland, 300 bushels Dunfield, 30 bushels Kanro (veg.), 5 bushels Bansei (veg.).

Minnesota

Faribault — Farmer Seed & Nursery Company, Manchu, Habaro, Mukden, Richland.

Wisconsin

Elkhorn — S. B. Simons & Sons, 400 bushels No. 3 Manchus, 500 bushels Mukdens.

Washington Beat

By Fred Lardner

Editor's Note: The opinions which follow are the writer's own, and not necessarily those of this publication.

Washington, D. C. — Recently the writer reported a series of hearings on a bill to add some eighty amendments to the Securities Exchange Act, a bill which, it is claimed, might hamstring stock market operations if certain amendments are adopted by Congress. Strangely enough, mention of soybeans occurred twice during these hearings.

After one session a New York broker-dealer, rather discouraged at the trend of the testimony, said: "To hell with this business. I came from Illinois. I've got land there. I'm going back and raise soybeans."

On another day, a man who obviously dislikes stock markets and brokers testified in favor of amendments which would prevent a broker from being a dealer at the same time.

"Well, if they can't make money at their regular racket," he observed, "they can go to raising soybeans."

Mr. Wickard predicts a shortage of fats and oils by the end of 1942. Some of his economists don't agree with him. They claim that 1942 production will take care of our needs for fats and oils and permit us to send our Allies as much or more than they've had in recent years. Only time will settle that difference of opinion.

Let's consider the story of Secretary Wickard and Leon Henderson, price administrator, as it relates to price. During Congressional debate on the Price Control Act, particularly following introduction of the Bankhead amendment giving the Secretary of Agriculture equal control over farm prices, the two engaged in a verbal sparring match. Wickard claimed his department was responsible for production, and should have a big say in prices, which influence production. Henderson said that divided control would gum up the price program.

The sparks literally flew into the air. Wickard accused Henderson's Office of Price Administration of not cooperating with the farm experts in formulating prices. Henderson came back with a long statement tending to prove a record of cooperation in formulating the first fats and oils price order.

Then Congress and the President enacted the law. What happened?

(Continued on page 6)

SOYBEAN DIGEST

EDITORIALS

(Continued from page 1)



THIS stirring symbol has been prepared by Walt Disney, and presented to Secretary of Agriculture Wickard. It represents the determination of the United States to send food and fiber to its fighting Allies, and to see that the shipments arrive.

And, as Secretary Wickard says, "to build the right kind of a world when peace comes." The emblem will identify United States food products wherever they are sent throughout the world.

The emblem will be available to all processors for use in connection with new printings of food labels, or as a stamp for crates and other containers. It will be used in addition to, but will not supplant, the usual labels and trade marks.

Without question, it will be used in connection with shipments of soy flour and soybeans. It is the national symbol of the "Food for Freedom" campaign.

MANY of our readers probably have been wondering just how many soybeans and how much soybean oilmeal is being shipped abroad. We don't have any figures on that, and probably won't have until after the War is over.

However, we do have a pretty good indication in the reports of purchases by the Surplus Marketing Administration, from March 15, 1941, when "stepped up" purchases were inaugurated until December 31, 1941.

During that period, 31,905,100 **pounds** of soybeans, cumulatively evaluated at \$830,479, F.O.B. point of purchase, were secured by SMA. Soy flour purchases for the same period totaled 20,230,000 pounds, valued at \$1,163,180. As these products currently aren't being used for domestic consumption under the food stamp plan, we may assume that the bulk of the soy purchases were for export.

During the period, SMA also purchased 600 tons of oil cake and meal, not designated as to type, and small quantities of oleo oil and oleomargarine.

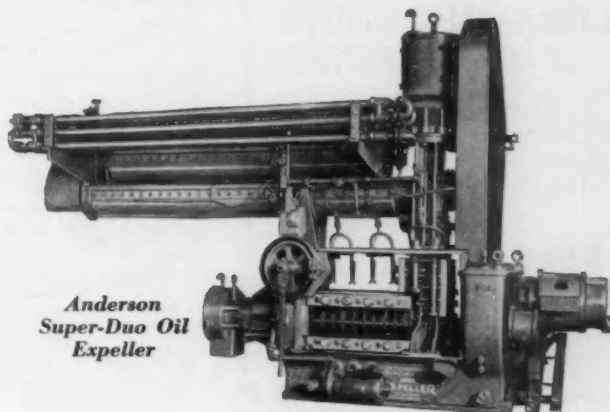
FEBRUARY, 1942



EXPELLER ENGINEERS *can help you with* **PLANT LAYOUTS**

★ Are you considering revamping your present plant layout or laying out a new plant? Then here's a valuable suggestion: call in an Expeller Engineer when you are working on your plans. These men have had wide experience in hundreds of oil mills. They know plant layout as well as efficient production. They can give you valuable information not only on pressing equipment but all other plant equipment. Yes, they can even train your operators. The advice of an Expeller Engineer may save you thousands of dollars. If you are interested, write today and ask an Expeller Engineer to call. Remember, there's no obligation connected with his call.

THE V. D. ANDERSON COMPANY
1958 W. 96th Street • Cleveland, Ohio



Anderson
Super-Duo Oil
Expeller

Washington Beat

(Continued from page 4)

Mr. Wickard, who was opposing Mr. Henderson but who, cagily enough, was not going on definite record as favoring the price advance to 110 per cent of parity, encouraged by the Bankhead amendment, made a speech saying that farm prices should remain around parity, and that his department would try to keep prices there.

The Senate Farm Block tore its hair
(Continued on page 12)

Develops His Own Soybean Harvester



Here it is!

G. E. Pritchard, Elizabeth City, N. C., invented his first soybean harvester in 1909, shortly after soybeans were introduced in that area, and here is his latest model utilizing the American farmer's non-gasoline consuming source of power, the horse.

According to Mr. Pritchard, this machine does two jobs at the same time where soybeans are interplanted with corn:

- (1) Cuts the cornstalks
- (2) Harvests the soybeans.

This enables the grower to utilize his ground for two cash crops — corn and soybeans. The machine has three sets of bales — on the end of the tongue, under the harvester, and on the beaters, enabling it to do a clean job with the cornstalks, and beans.

Mr. Pritchard is convinced that his machine can be retailed for \$325, and is interested in finding someone who will invest as a partner. He can be reached at Elizabeth City.

— s b d —

Soy Mill Provides New Kansas Industry

Fruit of the "new industries for Kansas" campaign which has been vigorously pushed the past 4 years, is the Kansas Soybean Mills, Inc., Emporia, equipped with one expeller with a capacity of 400 bushels of soybeans per day. Writing in "Progress in Kansas," official publication of the Kansas State Chamber of Commerce, F. B. Ross of Emporia, one of the directors, reports that from May 28 to the date of writing, apparently about December 1, 30,000 bushels of soybeans had been crushed, and the meal sold to feeders in the Emporia vicinity.

The Kansas Soybean Mills, Inc. was founded in September, 1940, with a capitalization of \$95,000, and utilized the property and storage facilities of the Lord Grain Company.

NEW SOYBEAN GOALS NAMED

Here are the leading revised U.S.D.A. farm acreage goals for 1942:

Oilbearing crops

Soybeans	9,000,000 acres
Flaxseed	4,500,000 acres
Peanuts	5,000,000 acres

Major staple crops

Corn	95,000,000 acres
Cotton	25,000,000 acres
Wheat	55,000,000 acres

Measures have been taken to encourage the raising of oilbearing crops. Purchases of soybeans have been guaranteed at \$1.60 per bushel, farm basis, for designated varieties of U.S. No 2 yellow, with location and grade differentials. This is 55 cents per bushel over the loan rate (Soybean Digest, Nov., '41), but several cents below farm prices currently prevailing.

Loans will be made on flaxseed, averaging at least \$2.10 per bushel, while peanut purchases will be guaranteed at \$82 per ton for U.S. No. 1 white Spanish type for oil, \$78 per ton for No. 1 Runners, and \$70 per ton for Class A Virginias.

"The goals place particular emphasis on the production of oil bearing crops such as peanuts and soybeans so that our supplies of oils and fats may not be reduced too drastically, even though imports from the Far East are cut off," says Claude R. Wickard, secretary of agriculture.

— s b d —

Purchase Linseed Oil

Of interest to the soybean industry is the January 17 announcement of the Surplus Marketing Administration of the purchase of 22,400,000 pounds of edible linseed oil.

— s b d —

One result of the war apparently will be increased industrialization of South America. Reflecting this is the announced decision of the Argentina Grain Board to crush 6 million bushels of flaxseed in the Argentine instead of the 1 million bushels annually that formerly have been crushed.

This still is a very small amount in comparison with the total supply. The Argentine carryover of flaxseed into the next season is estimated at 100 million bushels. The nation's 10-year average production of flaxseed is 67 million bushels.

— s b d —

"The war against the Axis will last at least 5 years, and all farmers' plans should be made on that basis."—Karl Brandt, Stanford, University.

SOYBEAN DIGEST

Why Risk \$10⁰⁰ to Save a dime?

A good crop of soybeans will grow on good land without proper inoculation—but it grows at an extra cost of at least \$10 per acre in nitrogen taken from the land.

Neither prior crops nor the presence of nodules guarantee the proper inoculation necessary to take this nitrogen "Free From the Air."

Always Use



INOCULATION

"THE PEER OF THE BEST"

Guarantee proper inoculation at a cost of only pennies per acre

TOP RANKING QUALITY AT NEW LOW PRICES

2 bushel size	\$.30
5 bushel size45
25 bushel size	1.95
30 bu. size (6-5 bu. cans)	2.60

KALO INOCULANT COMPANY
QUINCY, ILLINOIS

Manila Paper Praised Milk From Soybean

LIKE a page from history is a "Soya-Lac Supplement" of the Manila Tribune, published last August 16 in the Philippines capital. A full page, including a five column advertisement of Miller's Soya Lac, is devoted to the story of soya milk and the soybean.

"By unbiased laboratory analysis," says the lead article, "soya milk has been found to be virtually identical to cow's milk in nutritional elements, and higher, in fact, in protein content."

Cut copy on column five and six contains the following: "Paul Sycip, soya milk chemist who has recently arrived from an observation tour of American factories on soya milk manufacture, particularly the procedure used by the International Nutrition Laboratory in Mt. Vernon, Ohio. He stayed most of the time with Dr. Harry W. Miller, the owner of the patent on soya milk processing. Mr. Sycip has been admitted member of the American Soybean Association and is a chemist by profession, a graduate of the University of the Philippines."

DR. H. W. MILLER



Mentioned in P. I. Story

Another article quotes Rafael Alunan, Philippines Secretary of the Interior, as saying that "The National Land Settlement Administration is already committed to the growing of the soybean on a large scale in the Koronadal Valley and to making soy-

FEBRUARY, 1942

4 GOOD REASONS



Swift & Company's four soybean mills are conveniently located for producers all over the midwest area. You'll find them easy to reach and both pleasant and practical to use throughout the year, as outlets for the soybeans you raise. Plan to visit the one nearest you. You'll like the friendly welcome that awaits you.



SWIFT & COMPANY

beans one of the major producing crops."

John P. Dries, Saukville, Wis., a director of the American Soybean Association, sent the page from the Tribune to the Soybean Digest.

— s b d —

"Sub" for Milk

The protein in soybeans can be used for some of the purposes for which casein is ordinarily used. This should be of interest at the present time when emergency requirements of casein for edible purposes are curtailing other uses of casein.

Inspections Listed

The following inspections of soybeans have been reported by the agricultural marketing service of the USDA for the period January 1-15:

State	Total Carlots
Illinois	1,591
Indiana	172
Iowa	75
Missouri	31
Ohio	223
Total	2,092

SOYBEANS... and People

OUR article on the German Army Soya Cookbook (SD, Dec. '41) has created a great deal of interest among our readers — enough, we feel, to justify the printing here of a few of the detailed recipes, the general ingredients of which have been listed previously.

RECIPES

Thickened Soup

30 grams* good beef bones
 ½ liter* water
 Salt to taste
 30 grams soup vegetables
 Thickening:
 About 15 grams flour
 5 grams pure soya
 Water
 1 pinch salt, nutmeg

Wash the bones quickly, place them (as cold as possible) in a cloth bag, bring to a boil, and allow to boil for about 2 hours. Wash vegetables, cut in pieces, add to broth, and cook. Make a thick batter with thickening ingredients, turn this slowly into the boiling liquid, stirring constantly, and let boil up for a few minutes. The bones must previously have been removed. Season with salt, seasoning sauce**, and, if desired, with nutmeg and chopped parsley.

*Conversion factors: 1 gram is nearly 1/28 of an ounce, 1 liter equals 1.06 quarts.

**A liquid resembling Worcestershire sauce, but less highly flavored.

Vegetable Soup

50 grams Savoy cabbage
 50 grams carrots
 30 grams soup vegetables
 10 grams fat
 ½ liter water, or preferably soup stock
 salt
 If it is desired to thicken soup:
 10 grams rice or
 10 grams grits or
 30 grams potato flakes or
 10 grams flour
 5 grams pure soya

Clean, wash and cut vegetables as finely as possible. Heat and steam the vegetables in the fat. Add water and salt and cook until done. Rice or grits will be added for the last half hour, potato flakes at the end of the cooking period. If flour is used, a clear thickening is made of flour, fat, and vegetable broth and the soup thickened with it. Mix pure soya with cold water, add to the soup, and let boil up briefly.

Remark: Croutons fried in fat are an especially good addition to this soup.

Tomato Soup

½ liter broth
 5-7 grams margarine
 15 grams flour
 10 grams onions
 5 grams pure soya
 100-150 grams tomatoes or
 30-50 grams tomato paste

Prepare broth the same as for thickened soup. With margarine, flour, finely cut onion and broth make a light-colored thickening and

thicken the broth with it. Mix pure soya in cold water, add to the soup, and let boil up briefly. Put fresh raw tomatoes through the meat grinder and if necessary, through a sieve also, add the tomato pulp thus obtained or the ready-prepared article to the soup. Do not let the paste cook any longer. Season with salt, pepper, and, if desired, with chives.

Beef Roulade

150 grams rolled beef
 ¼ cucumber
 Onions, pepper, salt
 10 grams bacon
 5-7 grams fat
 10 grams onions
 Hot water
 Whole spices, bay leaves
 7-10 grams flour
 3-5 grams pure soya

Cut the cucumber in strips, the onions and bacon in slices. Place on the sliced meat with pepper and salt. Roll the meat and fasten together with twine or skewers. The flavor will be stronger if the slices of meat are thinly spread with mustard. Heat and brown the entire surface of the roulade with the fat. Add onions, hot water and spices and let the roulade stew. Mix flour and pure soya cold and thicken the gravy with it. Season with salt, pepper. If desired, add tomato paste, seasoning sauce, caraway seeds, or thyme.

Chicken Fricassee

150-180 grams chicken
 20-30 grams soup vegetables
 Salt to taste
 10 grams of skimmed-off fat
 (from the chicken broth or uncooked chicken fat from the entrails)
 7-10 grams flour
 ¼-½ liter chicken broth
 3-5 grams pure soya

Singe, draw, and wash the chickens carefully, put in the boiling water with soup vegetables and salt and cook until done. Cook Gizzards, heart, and liver with the rest, then disjoint into little pieces. Heat the chicken fat, make a clear thickened gravy with flour and broth and add the chicken meat. If the fat from the entrails is used it must first be carefully washed. Mix the pure soya in cold water, add to the broth and let boil up briefly. Season with salt and lemon juice. If desired, add capers or parsley.

Leeks

Not over 300 gram leeks
 5 grams margarine
 7-10 grams flour
 3-5 grams pure soya

Wash the large stalks of leeks very carefully, cut in pieces about 1 inch long, rinse again, place in a little boiling water and cook until done. Use margarine and flour to make a clear thickening with the water in which the leeks were cooked. Mix pure soya in cold water, add to gravy, let boil up briefly, and add leeks. Season with salt, nutmeg, and seasoning sauce. Add mustard if desired.

Remarks: The thickening must be very thick, since the leeks contain a great deal of water and the mixture will otherwise be too thin.

Spinach

200-300 grams spinach (canned)
 Salt
 5 grams fat
 7-10 grams flour
 3-5 grams pure soya

Bring the spinach to a boil with salt. Use fat and flour to make a thick, clear thickening with hot broth or water and thicken the spinach with it. Mix pure soya with cold water, add to spinach, and let boil up briefly. Season with salt and pepper. If desired, add nutmeg also.

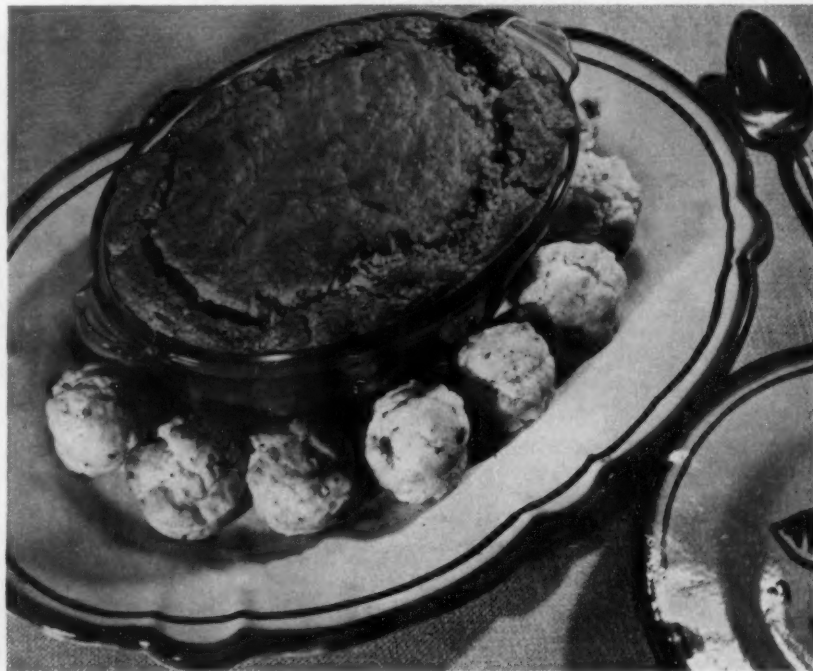


Photo by Fred G. Korth
 Soya flour finds its way into the baker's dozen — and into mother's kitchen as well. Here we see a pot pie — full of steaming vegetables and pieces of pot roast. And the crust? That is made of a mixture containing 25 per cent protein-rich soya flour. For strength, America needs soya flour.

INSURING YOUR OWN GOOD LUCK

Every living creature is made of the food it eats. If you want "good luck" with your livestock, therefore, you can do a lot about it by selecting feed that achieves a balanced ration.

Each carload of Staley's Soybean Oil Meal leaving our plant has its own certificate of analysis which guarantees what you are buying. Send for our free booklet: Staley's Soybean Oil Meal!



The sale of Staley's Soybean Oil Meal has been growing by leaps and bounds — and no wonder, for proof has been established it is an economical, palatable, healthful source of proteins!



The Staley Customer NEVER GUESSES He Knows!

FEED DIVISION

DECATUR, ILLINOIS **A. E. STALEY MFG. COMPANY** PAINESVILLE, OHIO

When You Are in the Market To SELL Soybeans or BUY Soybean Oilmeal

Get in Touch With Our Processing Plants

St. Louis, Mo.

Circleville, Ohio

Lafayette, Indiana

Iowa Falls, Iowa

. . . Purina Mills, St. Louis, Mo.



IOWA AAA HEAD



Chairman of the Iowa AAA, Albert J. Loveland, spoke on a special soybean program at Ames, Iowa, Monday, February 9.

170 Attend Round-Up

An enthusiastic crowd of 170 attended the annual Soybean Round-Up at Van Wert, Ohio, January 20. Speakers were Dr. R. E. Yoder, chief agronomist of the Ohio Experiment Station, Lyman Peck, nutritionist for the McMillen Feed Mills, and Sam Hollett, manager of the Swift and Company Processing Mills at Fostoria, Ohio.

The event was sponsored by the Van Wert County Soybean Committee — Rei Duprey, R. S. Oetzel, Dale Wortman, Lawrence Gilliland, Arthur Brooks, John Leonard, Lawrence Adam and W. G. Weigle.

— s b d —

North Carolina Farmers Plan Soybean Increase

The Soybean Digest now is in possession of farmers' intention-to-plant figures for the State of North Carolina, adding to our original data (Soybean Digest, Jan. '42).

According to the Raleigh office of the AAA, Tarheel farmers plan to plant 387,366 acres of soybeans in 1942, compared with 237,444 acres in 1941, or a percentage increase of 63.

The original North Carolina goal before the revisions was 225,000 acres. The indicated trend substantiates the national trend noted in the January issue.

— s b d —

Soybean Inspections Reach 26,245 Cars

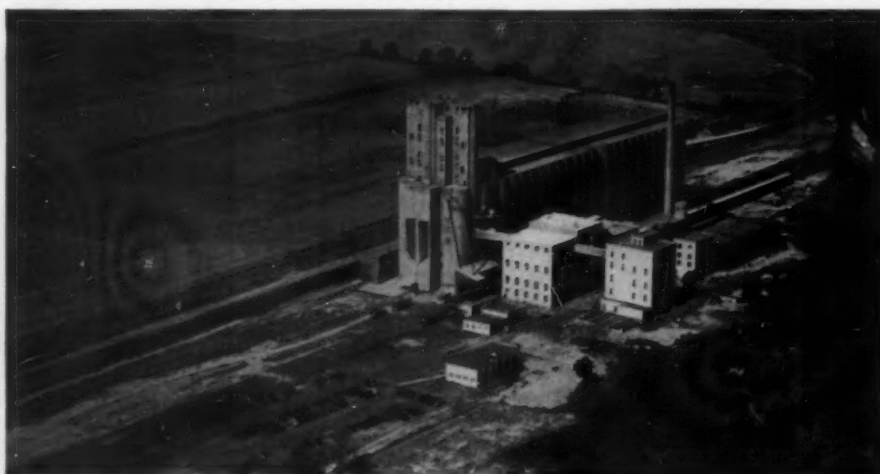
Inspections of market receipts of soybeans in December totaled 9,524 cars, or about 300 cars less than the November inspections, the Department of Agriculture's marketing service reports. This brought the season's total from October 1 to January 1 to 26,245 cars.

Only 17 per cent of the December inspected receipts graded No. 2 or better. Fifty-six per cent graded No. 3, and 27 per cent No. 4 or sample grade.

— s b d —

Seek Advice First

The National Home Study Council, 839 Seventeenth Street, N.W., Washington, D. C., recommends that no one enroll in a resident or home study course of instruction without first consulting the Council, his local librarian, or high school principal.



A. D. M. Soybean Processing Plant . . Located at Decatur, Illinois.

Other Soybean Processing
Plants Strategically
Located at:

CHICAGO
TOLEDO
MILWAUKEE
MINNEAPOLIS
BUFFALO

The Mark of



Quality Soybean Products

WHAT IS GOOD-WILL?

Good-Will is the disposition of a satisfied customer to return to the place where he has been well treated.

The Archer and Daniels families have been engaged in the Oil Milling business for a century (1840-1940), and the good-will which has been built up during those hundred years is jealously guarded in every transaction.

ARCHER-DANIELS-MIDLAND COMPANY
MINNEAPOLIS, MINN.

SOYBEANS FOR FARM GARDENS

UNCLE Sam, speaking through the United States Department of Agriculture has requested that city folk refrain from an orgy of gardening such as characterized the last war.

At that time, the efforts of hordes of amateur citified gardeners and "canners" weren't overproductive in relationship to the expenditure of land, seed, fertilizer, implements and elbow grease. The U.S.D.A. feels that city men should stick to the jobs best fitted to their abilities, and leave the gardening to the country people.

The tremendous effort at food production is to be borne by the "pros" — the farmers.

Tangible aid to farmers in their garden plans is P-39, an extension-experiment station bulletin soon to be released by Iowa State College. "Vegetable Soybeans," by Martin G. Weiss, Carrol P. Wilsie, Belle Lowe, and P. Mabel Nelson of the Iowa State staff, provides the answer to farm gardeners so far as soybeans are concerned in the Iowa area.

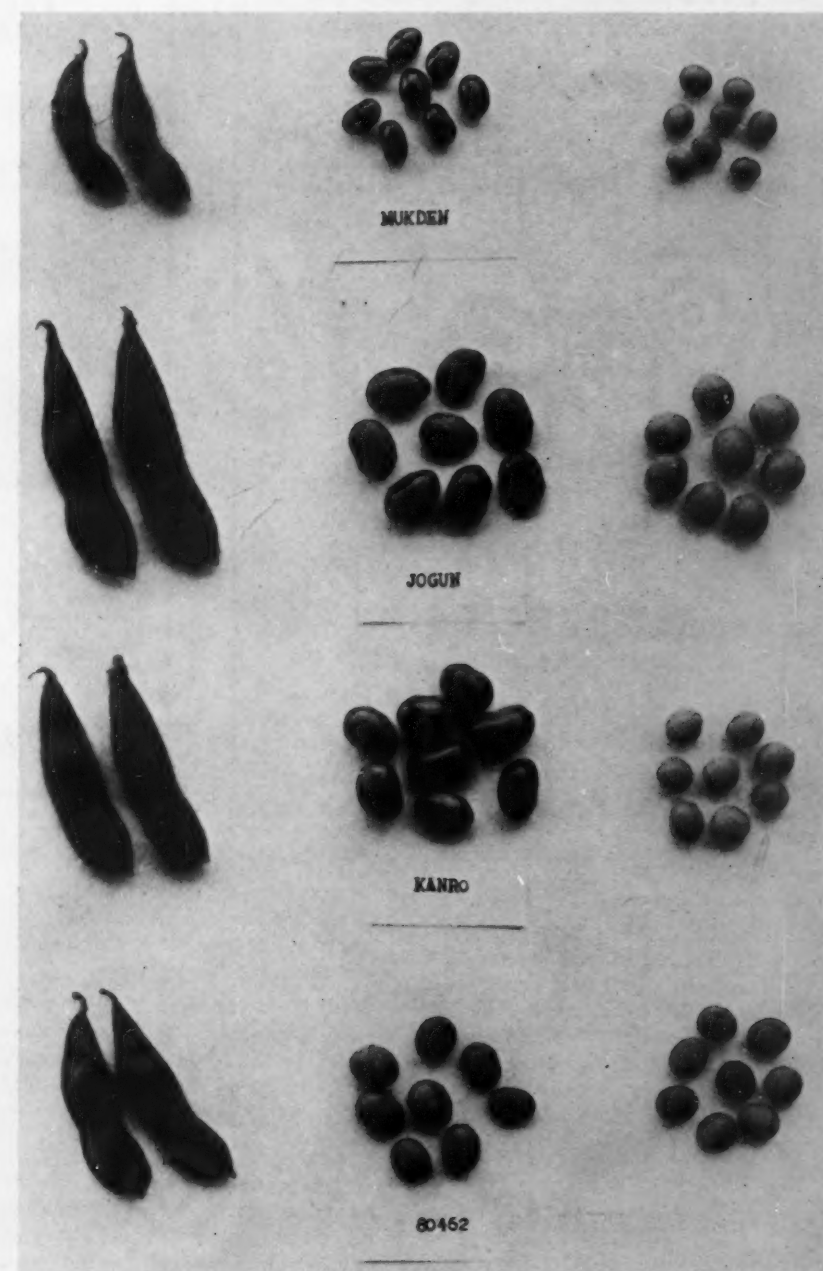
Dr. Weiss and Professor Wilsie grew the beans. Dr. Lowe and Dr. Nelson cooked them. Here is what they found:

1. The vegetable soybean is distinctly superior to the field soybean as a whole-bean food for human consumption. Used as a green vegetable, when harvested in the green bean stage, or baked as mature dry beans, the high nutritive value of the soybean makes it especially valuable in the human diet.

2. Eighty-nine vegetable varieties and four field varieties were tested for desirability as a human food. The varieties were judged on the basis of agronomic performance and desirability as a human food when in the green bean stage.

3. Three vegetable varieties of different maturities were selected as most desirable under Iowa conditions. They are: Sac, a very early variety, Kanro, a mid-season variety, and Jogun, a late variety (Soybean Digest, October, '41). When planted at the same time these three varieties provide a succession of green vegetable beans throughout the late summer.

4. Vegetable beans are prone to shatter, must be harvested immediately upon maturity. Seed yield of Kanro and Jogun is approximately 80 per cent that of commercially-grown field varieties. Sac, early maturing yielded much less.



Pods, green beans and mature beans of a field variety (Mukdens) and three varieties of vegetable beans. Photos by Iowa Agricultural Experiment Station.

cially-grown field varieties. Sac, early maturing yielded much less.

5. The palatability of vegetable soybeans is distinctly superior to the field varieties — specifically in flavor and texture. Kanro, Jogun and Sac ranked high among vegetable soybeans in this respect.

6. Reports on cooperative tests with home gardeners indicated that vegetable soybeans were higher in yield than either snap or lima beans.

7. Vegetable soybeans should be harvested between the times that the pods are two-thirds and completely full, but before the plants begin to turn yellow.

8. Shelling beans is greatly facilitated by parboiling for 5 minutes first.

9. CANNED GREEN SOYBEANS CONSTITUTE A "PALATABLE AND DESIRABLE FOOD." Adding sugar helps. "Green vegetable soybeans canned experimentally proved

(Continued on page 12)

Complete Service Printers for AGRICULTURAL ADVERTISERS



An organization thoroughly trained in the production of effective printed advertising for the poultry, feed and farm equipment industries. Your inquiry will promptly bring complete details of our service — all without obligation. Write us today.



WAVERLY PUBLISHING CO.

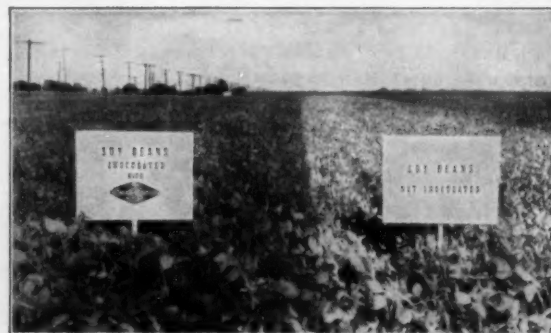
301 East Bremer Avenue

WAVERLY, IOWA

Publishing • Binding • Direct Advertising
Advertising Art



INOCULATION FOR SOY BEANS



EFFECT OF INOCULATION ON SOY BEANS

Treatment	Yield Seed	Pounds Protein per ton	
		Seed	Hay
Inoculated	46.6 bu.	705	316.2
Not Inoculated	34.7 bu.	621	292.4
Gain for Inoculation	11.9 bu.	84	23.8

(University of Illinois Bulletin No. 310)

Prepared only by

THE URBANA LABORATORIES
Urbana, Illinois

Washington —

(Continued from page 6)

at that speech. They accused Mr. Wickard publicly of bad faith, and what they said about him privately probably couldn't be printed here. The issue of price control may not be settled yet, but there is little doubt now that Wickard and Henderson and their people won't get along.

— s b d —

Soybeans for Gardens

(Continued from page 11)

to be a palatable and desirable food. Storage experiments indicate that a year or less of storage was more desirable than two years from the standpoint of both appearance and palatability of the soybeans."

The addition of lemon juice or vinegar is not recommended. The soybeans were processed in both water bath equipped with a tightly fitting lid, and in a pressure cooker for varying periods of time. In pressure cooking the petcock was closed after the jet of steam had appeared for 7 minutes. The processing period was calculated from this time.

Two to two and one-half hours in

hot water bath resulted in considerable spoilage in the canned beans. At 3 hours the spoilage was less than 1 per cent, and at 3 and one-half hours there was no spoilage.

With the pressure cooker, 60 minutes at 10 pounds pressure is recommended for the run of vegetable soybeans and 80 minutes at 10 pounds pressure for unusually mature beans.

• • •

A few canneries in the midwest now are equipped for soybean canning. For the next year, however, it is probable that most people who want to eat canned soybeans will have to do their own canning.

Seeds for vegetable varieties are available at a number of points throughout the Corn Belt, including the major seed houses. If you are interested, and want to be placed in touch with a grower of vegetable soybean seeds near to you, address your inquiry to The Soybean Digest.

— s b d —

Sees Selling Job

Nelson P. Noble, manager of Swift and Company's Champaign, Illinois soybean mill told members of the Illinois Farm Managers Association

February 6 that "the selling of soybean oilmeal depends on how good a job we can do in convincing the livestock grower that it is to his advantage, and that it will help us to reach our goal in food production quicker if he will feed soybean oilmeal to his livestock and poultry as recommended by the foremost nutritional experts."

— s b d —

Cottonseed Futures Down

Futures transactions in cottonseed oil during January aggregated 100,770,000 pounds, a decrease of 23 per cent compared with the 131,490,000 pounds traded in December, according to USDA.

On the Chicago Board of Trade futures transactions in lard aggregated 105,050,000 pounds during January, compared with 140,300,000 in December.

— s b d —

Soya flour is one of the cheapest known sources of calcium. One hundred grams in soya flour costs about one-fifteenth as much as it costs in wheat flour and one-third as much as it costs in milk.

SOYBEAN DIGEST

MARKET SUMMARY

	SOYBEANS		
	February 11	February 2	January 9
May	1.96 3/4	1.95 1/4	1.83 3/4
July	1.98 7/8	1.98 1/4	1.85 1/2
October	1.92 3/4	1.94 1/4	

SOYBEAN OIL

Tanks, Midwest Mills.....	11 3/4c	11 3/4c	11 1/4c
---------------------------	---------	---------	---------

SOYBEAN OILMEAL

May	\$39.75	\$41.00	\$39.15
			@39.50
July	39.00	40.50	39.05
	@39.50	@41.00	@39.50
October	38.50	39.50	
	@39.00	@40.50	

CASH CONVERSION SCALE

1 Bushel Soybeans, wt. 60 lbs.....\$1.85

INTO

8.8 lbs. Crude Oil @ 11 3/4c.....1.034

49.5 lbs. Meal @ 1.88c......931

\$1.965

Gross Processing Margin per Bu.....11.5c

Gross Processing Margin per Bu. last month.....16.6c

SHORTENING SHIPMENTS

Week ending January 31.....9,355,440 lbs.

Week ending February 7.....8,002,394 lbs.

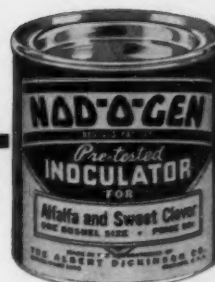
During the uncertainty pending final passage of the price control bill, soybeans underwent a speculative flurry, advancing to \$2.03 3/4 for May futures on January 30, an all-time high for the Chicago Board of Trade. After that date a slump occurred, with soybeans steady at about 7 cents below the peak.

Cash soybeans ranged from about a nickel below futures in Chicago to 20c below futures on the farm in Iowa.

Soybean oil has steadied, at least temporarily at 11 3/4c, the ceiling set by the OPA.

Soybean oilmeal fell off with soybeans, but retained a premium over cottonseed oilmeal ranging up to \$2 a ton, a condition which probably is only temporary.

Prospects are for continued strong markets for soybeans, soybean oil, and soybean oilmeal at least for the remainder of the year.



"Let our object
be our country,
our whole country
and nothing but
our country"

— Daniel Webster

The Inoculator Division

THE ALBERT DICKINSON COMPANY

Chicago, Illinois Est. 1854

NAD-O-GEN

The Pre-tested Inoculator

Properly processed, palatable, nutritious



CENTRAL BRAND

41%

SOYBEAN OIL MEAL

★ ★ ★

CENTRAL STAR BRAND

44%

SOYBEAN OIL MEAL



A basic source of vegetable protein in Master Mix
Concentrates and Feeds.



Mr. George Thomas, in charge of bean buying, and his assistant Mr. Bud Townsend, are now located in our general offices at Fort Wayne. They were formerly located at Decatur — this move has been made in order to improve our facilities for enlarged bean buying demands.

CENTRAL SOYA CO., INC., and McMILLEN FEED MILLS

MILLS: DECATUR, IND., and GIBSON CITY, ILL.

GENERAL OFFICES, FORT WAYNE, IND.



This illustration shows what NITRAGIN inoculation did for soybeans. In a practical demonstration at an Eastern agricultural experiment station uninoculated soybeans failed to survive in their struggle for existence against weeds.

Weeds tell the story on the surface, but there is more to be told in the soil. The uninoculated soybeans slowly starved to death because effective nitrogen fixing bacteria were not present. From the very start, the NITRAGIN inoculated soybeans were able to take their much needed nitrogen from the air, as evidenced by their more rapid, luxuriant growth, dark green leaves, and ultimate survival in the face of actual crop failure in the uninoculated plot. And the cost of such effective Nitragin inoculation is about 12 cents per acre.

Abundant experiment station evidence proves that it pays to inoculate every seeding of legumes, whenever and wherever they are sown. Wisconsin research workers say that . . . "inoculation with good strains of the proper organisms is decidedly beneficial and in general is insurance against crop failure due to lack in numbers of effectiveness of the soil bacteria." Illinois reports that "most farmers will find soybean inoculation a good insurance and a practice that should be followed yearly."

For Your Protection

You cannot tell if your soil is well fortified with sufficient numbers of the right kind of bacteria, but you can be sure if you inoculate your soybeans with NITRAGIN "S" Culture. Used by farmers for over 40 years, NITRAGIN is the oldest, most widely used inoculant. It is recognized by agricultural leaders for its quality and dependability, and is produced in the largest, most modern laboratory of its kind in the world. For your protection and soybean crop insurance, get NITRAGIN from your seedsman.

FREE LEGUME BOOKLET

Tells how to grow better soybeans, alfalfa, clovers, etc. for cash, feed, and soil building. Also special soybean bulletins. Write to—



THE NITRAGIN CO., Inc.

3871 N. Booth St., Milwaukee, Wis.